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ABSTRACT

Effects of participation by 904 elementary and secondary school social studies students in a political education project are discussed. Objectives of the project, entitled Improving Citizenship Education (ICE), are to assess student political knowledge (factual information, generalizations, principles, thinking and participatory skills), before participation in the project and to collect data for a three-year study of political knowledge at grades three, eight, and twelve. The sample consisted of students in elementary and secondary school social studies classes involved in ICE and from classes in matched non-project schools. Measurement instruments were developed to assess student knowledge of national, state, and local government; democratic principles; politics; law; individual rights; and global affairs. Findings indicated that knowledge of politics for students in experimental and control classes was comparable. Recommendations include that educators should: make efforts to include citizenship education as a planned and systematic part of the K-12 social studies program, improve teacher education, mobilize support of the administration, and use school and community political education resources. Tables and references conclude the document. (DB)

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WHAT DO STUDENTS KNOW ABOUT POLITICS?

INITIAL REPORT ON A THREE-YEAR STUDY OF STUDENT POLITICAL KNOWLEDGE

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WHAT DO STUDENTS KNOW ABOUT POLITICS?

INITIAL REPORT ON A THREE-YEAR STUDY OF STUDENT POLITICAL KNOWLEDGE

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The study that is being reported here is one facet of the work being done in the Improving Citizenship Education Project, which is funded under Title IV of the Elementary and Secondary Education Act by the Georgia Department of Education. The project is being conducted in the Fulton County (Georgia) School System which serves a sprawling, populous district which curls around the western boundary of the city of Atlanta. The educational improvement project is a joint effort of the school system and the University of Georgia's Institute of Government. It is one of a number of political/citizenship education projects currently found in local school districts (Hepburn, 1979a).

The aim of the project is to enhance the political education of students and better prepare them for democratic citizenship by improving the components of social studies education, kindergarten through twelfth grade. Citizenship education is equated with the development of political knowledge and attitudes which contribute to political awareness and competence in several levels of political interaction -- in school, local community, the state, the nation and globally.

The broad range of activities of the ICE Project involve teachers, supervisors, and administrators from the school district, political scientists and social studies professionals from the university, and resource people from the local community in the efforts to design, implement, and evaluate the K-12 citizenship program in the school system (Hepburn, 1979b). Table 1 shows the general goals of ICE, and Figure 1 shows the multiple variables through which the program is being conducted.

My involvement with the project has been twofold: I am coordinator of the teacher education program, which in the current education jargon is called "staff development." I am also serving as coordinator of the evaluation program which requires a review of process by assessing changes in each of the program components and a review of product by testing the effects on students.

Students are being tested for both political knowledge and attitudes. This paper provides a brief summary of the development concerns and the first year results of the three-year study of political knowledge. The term "knowledge" here includes factual information, generalizations or principles, and skills, including thinking skills and participatory skills. Focusing on the school and its curriculum as a socializing agent. our purposes in testing student knowledge are two: 1) to assess student political knowledge at the inception of the citizenship program, 2) to conduct a three-year annual trend study of political knowledge in the 15 experimental schools involved in the Improving Citizenship Education Project and to collect similar data in 15 matched control schools continuing with the regular curriculum.

The Search For Ready-Made Tests

A review of available instruments produced very few options. Much of the political socialization research on political knowledge is based on large sample surveys utilizing 6-7 item scales. For the most part these instruments were rejected because of length, content, and inadequate information about their validity and reliability for measuring political knowledge and skills learned in school.

For example, the Political Information Scale developed by Matthews and Prothro (1966) contained seven questions on federal, state, and local government. The questions asked for: 1) Franklin D. Roosevelt's party affiliation; 2) the number of Supreme Court justices; 3) the last two states to enter the United States; 4) the length of the term of a United States Senator; 5) the name of the governor in the respondent's state; 6) the length of the term of the governor in the respondent's state; and 7) the name of the county seat in the respondent's county. The authors offered no evidence of validity and no data on reliability. Questions regarding the validity of some of the items and the applicability of the test outside of the South were raised by Robinson, Rusk, and Head (1969). They considered the test to have very limited face validity. Did these questions provide a true measure of the political knowledge of students? Knowledge would have to be defined very narrowly. Also, reliability was dubious because of the short length of the instruments.

Probably the most cited study in the school political socialization literature is the one conducted by Langton & Jennings (1968). Their study reported that the high school civics curriculum had little impact on student knowledge and attitudes. This widely quoted study has shaped

the assumptions in much of the subsequent research on high school political education. Yet the measure had many weaknesses. It was a six-item instrument asking students to identify: 1) the number of years a U.S. Senator serves; 2) the country Marshall Tito leads; 3) the number of members of the U.S. Supreme Court; 4) the name of the governor of their state; 5) the nation that during WWII had a great many concentration camps for Jews; and 6) whether President Franklin Roosevelt was a Republican or a Democrat.

Four of the items in the Langton and Jennings instrument are evidently from Matthews and Prothro's Political Information Scale. The two additional items (2 and 5) are clearly not valid measures of knowledge of content of high school civics courses. Although Langton and Jennings reported a coefficient of reproductibility of .92 for the overall test (i.e., test-retest consistency) that statistic is noted for high spurious correlations. In addition, the length of the test raises serious questions of reliability.

Similar short, factual-recall instruments containing from two to nine items have been used by Almond and Verba, 1963; Borg, 1966; Button, 1971; Ginsberg, 1977; and Rodgers, 1973, to measure what was termed "political knowledge," "political information," or "citizenship knowledge." Overall, these instruments were low level cognitive tests of very specific knowledge. They appear valid for assessing the effects of only a very small portion of the traditional curriculum. Their content and construct validity are doubtful for purposes of measuring political knowledge gained in school, with or without an educational improvement program. Considering that the reliability of a test is influenced by its length, and reduced reliability may produce an adverse effect on the test's validity (Borg and Gall, 1971), an instrument was sought which

was long enough to indicate true score variance, but not too long to administer in the classroom.

Paper and pencil tests developed by the National Assessment of Educational Progress (1973, 1978) for testing the political knowledge of 9, 13, and 17 year olds appeared at first to offer useful norm-referenced instruments for both elementary and secondary levels. However, NAEP does not release all of the test items. Additional negating factors were 1) that test items are modified or dropped from one assessment to the next and 2) knowledge and attitude items were mixed, a feature which could interfere with construct validity as well as reduce the potential for analysis.

Probably the most carefully validated and field tested measures of political knowledge which we could find were those developed by Torney and Oppenheim for a study conducted for the International Association for the Evaluation of Educational Achievement (Torney, Oppenheim and Farnen, 1975). Their tests were designed for cross-national surveys of student knowledge of civics at ages 10, 14 and 18. The tests were pilot tested and analyzed for internal consistency and validity, and the data for tests and subtests were presented in their report. The only drawback to the knowledge test was that it was based on a "common core" of civic education identified in ten countries. The cross-national objectives and international orientation of the research reduced the test's potential for assessing the influence of the existing curriculum in the school system and for measuring the impact of the improvement project, which stresses the local and state political communities as milieu for learning political knowledge and skills.

Our requirements for instrumentation were four: 1) *content validity* or measurement of political knowledge and skills relevant to the curriculum and the citizenship education improvement objectives of the project; 2) *reliability* or consistent measurement of student knowledge and skills within the test; 3) potential for *norm referencing*, so that tests could be used longitudinally within the school system and across school systems in the state; and 4) applicability at three grade intervals -- third, eighth and twelfth grades. Because we could not find available tests which were appropriate for this study, we decided to develop our own.

The Instruments

It was clear that we would need two knowledge tests -- an elementary grades test with concepts and wording appropriate for third grade level and a secondary test for use at grades eight and twelve. We decided on a three-alternative multiple choice format for the elementary test and four-alternative multiple choice questions for the secondary students. Multiple choice tests are familiar to students and can be used to measure a broad range of knowledge in a short period of time. They are easy to administer and score and allow for high reliability without extensive questioning (Payne, 1976).

Items were written to reflect goals (Table 1) which were then translated into specific objectives of the project, and grade-by-grade citizenship objectives developed by the teachers to fit into the existing social studies curriculum. The referencing of objectives to goals, and subtests to objectives can be found in Tables 2 and 3. The subtest areas into which the questions were organized are briefly defined below:

Subtest Areas

1. National government - federalism, bicameral lawmaking, executive power and roles, judicial powers, separation of powers, checks and balances, policy-making processes, interest groups, lobbies, electoral college, bureaucracy, national revenues and expenditures, U.S. citizenship.

2. State and local government - intergovernmental relationships, law-making at the state and local levels, state and local citizenship services of state and local governments, financing services, executive leadership, bureaucracy, local interest groups.

3. Democratic Principles - popular sovereignty, constitutional republic, limited powers of government, majority rule, minority rights, reserved powers, general welfare.

4. Politics - political ethics, political symbols, two-party system, campaigns, elections, voting behavior, representation, public opinion, means and limits of political power, political socialization, political leadership.

5. Law and Individual Rights - rule of law, equality before the law, justice, the bill of rights, judicial principles, individual rights against government, the limits of individual freedom, citizen responsibility.

6. Global Affairs - interdependence, multi-national organizations, United Nations, balance of power, international agreements, deterrence, detente, international assistance and foreign aid.

7. Analytical Skills - evaluating information and information sources, interpreting and evaluating quantitiative data, distinguishing fact from opinion, synthesizing information from charts and graphs, making informed systematic decisions on public issues.

8. Participation Skills - conflict resolution skills, news awareness skills, registration and voting skills, skills for participation in judicial process, party and interest group participation, career awareness, securing basic government services.

The two tests were developed, pilot-tested, evaluated and revised during the project's first year and then used for assessment purposes. A more thorough report of the development research is presented elsewhere (Hepburn and Strickland, 1979). Following is a brief description of each test designated for annual data collection in the second and third years of the project and for at least one year beyond.

1. The Elementary Citizenship Knowledge Test is a 41-item test which met two checks on content validity -- referencing to project goals and specific curriculum objectives, and review by the school social studies curriculum specialist and political education specialists working on the project. The test with seven subtests was designed to be read to third graders by their teacher , but it can be used as a self-read test by higher elementary grades where the reading level is at least third grade. Initial use with 135 third graders produced a reliability of .73.
2. The Secondary School Citizenship Knowledge Test is a 73-item instrument with eight subtests. It was put through a careful equivalent forms reliability test. In the assessment of 153 eighth graders and 190 twelfth graders the test had a high equivalent form reliability (.83) and a high internal consistency reliability (.91). It was referenced to project goals and objectives and curriculum objectives as was done with the third grade test.

   In addition, the 12th grade scores were checked for their relationship to number of social studies courses taken and to grade point average. Both were found to be significant, indicating criterion-related validity (a positive relationship

between test scores and another reliable measure of citizenship knowledge).

The mean score differences between 8th and 12th grade, about a 17-point difference, suggested construct validity, i.e., that groups which can be assumed to differ will score differently on the same instrument.

Overall the test development study and the assessment results showed that we had valid and reliable tests to use in collecting the three-year trend data.

Collection of the Baseline Data

In the Spring of 1979 we carried out an extensive testing program to obtain the baseline data for the three-year trend study. Data were collected from intact classes in 13 secondary and 14 elementary schools of the total 19 high schools and 60 elementary schools in the system. A total of 904 Citizenship Knowledge Tests were collected.

Sample

The school district which includes 35,000 students ranges from urban to suburban to rural, but is mainly high density suburban. Fifteen of the schools (8 elementary and 7 high schools) had social studies teachers and principals taking part in the preparations for the citizenship education improvement experiment. They included urban, suburban and small town-rural schools roughly in proportion to the distribution in the district./ Classes were selected randomly within grade levels within schools. Classes in these schools were matched with classes from other schools with similar demographic, social and school characteristics. (Information on population, occupation, and mobility was obtained from the Atlanta Regional Commission, while information on the Iowa Test of Basic Skills, participation in free and reduced charge

lunch program participants, and general income ranges was obtained from the school systems Pupil Personnel Office.)

Seven twelfth grade classes, seven eightn grade classes and seven third grade classes were randomly designated for collecting baseline data in the 15 schools slated for the citizenship improvement experiment, referred to as the *experimental schools*. They were matched with seven classes at each grade level from non-project schools, referred to as the *control schools*. In total, baseline political knowledge data were obtained from 319 third grade students, 312 eighth grade students and 273 twelfth grade students (see Table 4).

Results

I mentioned earlier that this study had two purposes: 1) to assess student political knowledge in the school system at the inception of the citizenship program and 2) to collect baseline data for a three-year study of political knowledge at grades 3, 8, and 12 comparing experimental schools and control schools. To be able to accomplish the second objective in subsequent years, it is important to be assured that the experimental and control students are at approximately the same knowledge levels before the experiment begins.

From Table 4 you can see the maximum mean score difference between experimental and control classes in any grade group is 2.4. This is the difference between the eighth grade control and experimental test scores. In every case the control group has a slightly higher mean score which assures us that the experimental classes at each grade level are starting with no advantage. Generally, the experimental and control classes appear to be well matched with no practical difference between them.

To get an overall picture of student political knowledge in the school system (both experimental and control schools) Tables 5 and 6 summarize twelfth and eighth grade test results on the Secondary School Citizenship Knowledge Test, and Table 7 summarizes third grade performance on the Elementary Citizenship Knowledge Test, Ideally if we could use the same instrument at all three grade levels, we could trace maturation and determine progression in political knowledge from third to eighth to twelfth grades. But because we had to develop a test with shorter length, narrower content scope, and a more restricted vocabulary for third grade students, the test data are not comparable across all grade levels. Therefore, the twelfth and eighth grade totals are shown on a separate page from the third grade results.

Twelfth graders scored an average of 44.2 on 73 items or 60.5% correct. Overall, the twelfth grade students show little variation of performance on subtest with the exceptions of the law and individual rights subtest which was the lowest with an average of 51% correct, and the subtest on political participation knowledge with a high average of 68.8% correct. Seniors scored a surprising 64.7% on the state and local subtest this year, a full 7 percentage points above the performance recorded in the first-year instrument development study. This score, relative to the national government subtest score of 55.9% correct, is also surprising since national government is usually studied in the junior and senior year. This may reflect current interest in state-local issues in the Atlanta metro area. Local taxes, crime, and conflicts over local government service responsibilities are among the issues making TV and newspaper headlines this year. All of these average scores seem low for graduating high school seniors -- especially when we consider

that all have been required to take several high school government and history courses which should contribute to their citizenship knowledge. If students were to attain 75% proficiency on the test, it would require a 10 point increase in the mean, no small task for the schools!

The eighth grade scores averaged a mean of 28.7 on the same 73-item test or approximately 15 points lower and nearly 21 percentage points lower than the twelfth grade. Higher mean scores on the same test by twelfth graders compared to eighth graders again indicates the construct validity of the test. Thus it reflects change that generally takes place in student political knowledge as students progress through high school, in this case a 15 ½ point difference. When we reflect on the pattern found in our schools of requiring American civics, government and history, this does not seem like much of a gain for four years of social studies education. Looking at the subtests, the highest eighth grade performance on the state and local government subtest probably reflects the standard social studies offering in the Fulton County system and throughout Georgia -- Georgia government, history and culture. Law and individual rights and national government were the poorest performance areas for eighth graders just as they were for seniors.

The results of the Elementary Citizenship Knowledge Test given to 319 third graders in the sample (Table 7) suggests that they had a grasp of over half the political knowledge that might be taught in elementary school. Third graders are farther advanced toward attaining citizenship education objectives as defined by the elementary knowledge test, than are the secondary students toward attainment of knowledge objectives in the secondary test.

In perusing the subtest scores, it should be noted that although the overall reliability of the third grade test was moderately high, (Table 8) calculations of subtest reliability coefficients completed just this week, showed that subtest reliabilities on this test were low. This suggests that the test has a high enough consistency in assessing overall political knowledge, but that it should not be used to evaluate third graders' knowledge of political concepts. This is not surprising, since the political socialization literature indicates that complexity, differentiation and conceptual clarity in the political knowledge of children increases with age and education. (Hess and Torney, 1967; Adelson, 1971).

Summary

Two citizenship education tests were developed to assess the political knowledge of students. The two tests, the Elementary Citizenship Knowledge Test and the Secondary Citizenship Knowledge Test, were developed, pilot-tested, evaluated and revised in 1977-78. Development research found them to be reliable and valid tests.

The test data collected in March of this year were from classes in elementary and secondary schools involved in the Improving Citizenship Education Project and from classes in matched non-project schools. The tests were given to third, eighth and twelfth grade classes. The test results are the baseline data of a study in which the political knowledge of third, eighth and twelfth grades students will be tested annually for the next two, and possibly three years.

The results from this first year reveal that the classes in the experimental schools of the project and the classes in the control schools are comparable. The data also indicate that there is much to be done to improve political education. Political education as it is now conducted -- by means of a few specific courses in the secondary schools and by hit or miss in the general social studies curriculum of the elementary schools -- appears not be very effective.

Improving Citizenship Education is attempting to modify political education by making it a planned, systematic part of the kindergarten through twelfth grade social studies program, by improving teacher education and by mobilizing the support of the administration and school and community resources.

Subsequent testing in this study will show whether these educational improvement efforts can make a difference. For evaluation purposes it must be a significant and practical difference in the political knowledge and skills of students.

Figure 1

IMPROVING CITIZENSHIP EDUCATION: CURRICULUM CHANGE PROCESS

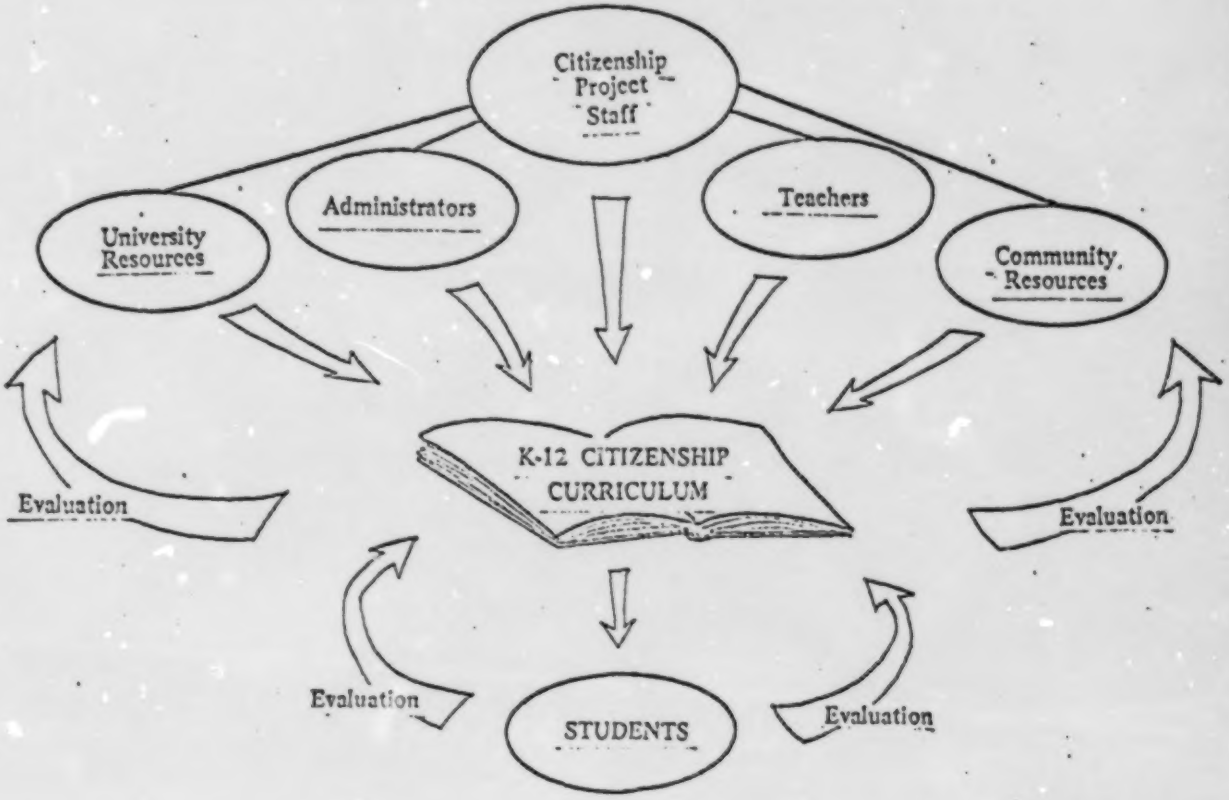

Table 1

Goals of the Improving Citizenship Education Project

1.	Understanding and acceptance of the responsibilities of U.S. citizenship.
2.	Understanding of the structure and operations of local, state, and national government.
3.	Understanding of the roles of individuals in the political decision-making processes and the skills for participating.
4.	Understanding of the principles of individual rights and learning to make choices in the context of concerns for the society as a whole.
5.	Understanding of the U.S. legal system and a commitment to rule of law.
6.	Knowledge of current public issues and skills for evaluating alternative choices in regard to these issues.
7.	Understanding of the interdependence of the global community and the political processes in operation internationlly.
8.	Understanding of the means to participate in school, local, state, and national political processes.
9.	Understanding of the need for government and community services and the ways to secure, utilize, and contribute to these services

These contain both knowledge and attitude goals.

Table 2

Specific Knowledge Objectives - Improving Citizenship Education Project

1.0 Know and apply specific facts, basic concepts, and processes related to government and politics.

- 1.1 Identify specific facts, processes, and basic concepts of national government.
- 1.2 Identify specific facts, processes, and basic concepts of state and local government.
- 1.3 Identify specific facts, processes, and basic concepts of democracy.
- 1.4 Identify specific facts, processes, and basic concepts of politics.
- 1.5 Identify specific facts, processes, and basic concepts of law and individual rights.
- 1.6 Identify specific facts, processes, and basic concepts of global affairs.
- 1.7 Identify participation skills related to government and politics.
- 1.8 Utilize analytical skills with government and political data and issues.

Table 3

Relationship between Goals and Specific Objectives of the Improving Citizenship Education Project

Specific Objectives	Goals								
	1	2	3	4	5	6	7	8	9
1.1	X								X
1.2	X	X							X
1.3	X		X						
1.4	X							X	
1.5	X			X	X				
1.6	X						X		
1.7	X					X			
1.8	X		X					X	X

Table 4

Comparison of Experimental and Control Schools

1979 Trend Data

	N	Mean	S.D.	% Correct
TWELFTH GRADE (73 Items)				
Experimental	145	43.6	11.7	59.7
Control	128	44.9	10.5	61.5
EIGHTH GRADE (73 Items)				
Experimental	161	27.5	8.4	37.6
Control	151	29.9	10.5	40.9
THIRD GRADE (41 Items)				
Experimental	155	22.2	4.9	54.1
Control	164	23.4	5.3	57.0

Table 5

Political Knowledge By Subtests
1979 Trend Data

Twelfth Grade Scores
N = 273

	# of Items	Mean	S.D.	% Correct
Total	73	44.2	11.2	60.5
National	11	6.2	2.5	55.9
State & Local	10	6.4	1.8	64.7
Politics	11	6.9	2.4	62.4
Democratic Principles	7	4.5	1.6	64.9
Law & Individual Rights	10	5.1	1.9	51.3
Global Affairs	5	3.1	1.3	62.0
Participation Skills	10	6.9	1.8	68.8
Analytic Skills	9	5.1	1.6	56.2

(Range of Scores 67-13)

Table 6

Eighth Grade Scores
N = 312

	# of Items	Mean	S.D.	% Correct
Total	73	28.7	9.5	39.3
National Government	11	3.7	2.0	33.2
State & Local Government	10	4.4	1.9	43.8
Politics	11	4.4	2.1	40.4
Democratic Principles	7	2.9	1.5	42.4
Law & Individual Rights	10	3.5	1.6	34.6
Global Affairs	5	2.0	1.2	40.6
Participation Skills	10	4.3	1.9	43.0
Analytic Skills	9	3.5	1.6	38.7

(Range of Scores = 58 - 10)

Table 7

Political Knowledge By Subtests
1979 Trend Data

Third Grade Scores - 1979
N = 319

	# of Items	Mean	S.D.	% Correct
Total	41	22.8	5.1	55.6%
National	6	2.9	1.2	49.0
State & Local	8	4.7	1.5	59.8
Law & Individual Rights	7	3.0	1.2	43.5
Politics/Pol Ethics	7	3.6	1.4	50.8
Global Affairs	5	3.2	1.1	63.1
Participation Skills	4	2.8	1.0	69.4
Analytic Skills	4	2.6	1.0	64.1

(Range of Scores 34-10)

Table 8

Reliability Coefficients

Citizenship Knowledge Tests
(1979 Trend Data)

	Grade	# of Items	Cronbach Alpha
Secondary Test	12	73	.89
	8	73	.84
Elementary Test	3	41	.68

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